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Alamineh-1

Honorable Commissioner of Patents and Trademarks
Washington, DC 20231

Sir:

IN THE CLAIMS:

Please add the following claims:

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21. (Original) A method of operating a base node in a
packet-switched network, comprising the following steps:

- a) repeatedly examining status of links connecting to the base node; and
- b) if a change in status is detected, flooding the network with news of the change, in messages which are directed to nodes in the network, which messages become self-propagating and self-terminating because of rules which the nodes follow.

22. (Original) A method of operating a node in a
packet-switched network, comprising the following steps:

- a) repeatedly examining status of links connecting to the base node;
- b) if a change in status is detected by a node, flooding the network with news of the change in messages which are self-propagating and self-terminating; and

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c) after flooding, receiving at least some of the propagating packets at the base node.

23. A method for use with a base node within a network, comprising:

a) maintaining a status table which indicates operational status of data links in the network;
b) testing operability of data links connected to the base node;
c) if testing indicates a data link DEF connected to the base node is defective,

i) generating a new Route Status Packet, RSP, which identifies

A) identifies the defective data link DEF,

B) identifies the base node as originator of the new RSP,

C) contains an initial age of the RSP, and

D) contains a sequence number of the RSP; and

iii) transmitting copies of the new RSP to all neighbors of the base node, but not using data link DEF.

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24. Method according to claim 23, and further comprising:

d) if an incoming RSP originating from another node N is received at the base node,

i) comparing the incoming RSP with previous RSPs received from node N, and

A) if the incoming RSP has a sequence number exceeding that of a previous RSP received from node N, then

1) accepting the incoming RSP, and

2) using data in the incoming RSP to update the status table;

B) if the incoming RSP has a sequence number which does not exceed that of a previous RSP received from node N, discarding the incoming RSP.

25. Method according to claim 24, and further comprising:

e) using data in the incoming RSP to update

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the status table,

f) decrementing age of the RSP, and

g) transmitting copies of the age-decremented RSP onto links leading from the base node.

26. Method according to claim 24, and further comprising:

e) receiving an incoming RSP at the base node; and

f) ascertaining whether the incoming RSP received is a copy of an RSP previously originated by the base node and, if so, discarding the RSP.

27. Method according to claim 24, and further comprising:

e) at the base node, queuing data packets which would be transmitted over the defective data link DEF, while data link DEF is defective.

28. Method according to claim 27, and further comprising:

f) when the base node receives information indicating that data link DEF is operational, transmitting the queued data packets onto data link DEF.

29. Method according to claim 28, and further comprising:

g) updating the status table at the base node, to

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indicate correct status of data link DEF.

30. Method according to claim 27, and further comprising:

f) for packets in the queue, generating substitute routes using operational links, and initiating a process of emptying the queue, using the substitute routes.